What is claimed is:

- 1. A method for decoding received sums of QPSK-modulated spreading codes corresponding to elements of CFC codewords, comprising:
- (a) despreding received sums of QPSK-modulated spreading codes with each of said spreading codes;
- (b) forming linear combinations with coefficients  $\pm 1$  and  $\pm j$  of the results of step (a), said combinations corresponding to possible sums as elements of CFC codewords;
  - (c) finding the maximum of said combinations of step (b);
  - (d) determining a codeword and cyclic shift from the results of step (c).